

# EH5700L Legacy® Series Environmental Enclosure

Installation/ Operation Manual

C1422M-C (4/98)

# **CONTENTS**

Section		
1.0	GENERAL	
2.0	DESCRIPTION	4 4
3.0	INSTALLATION	5
4.0	OPERATION	9
5.0	MAINTENANCE	9 9
6.0	SPECIFICATIONS	10
7.0	WARRANTY AND RETURN INFORMATION	12

# **LIST OF ILLUSTRATIONS**

<u>Figure</u>	<u>Pag</u>	<u>e</u>
1	Exploded Assembly Diagram for Blower6	
2	EH5700L Series Input Wiring Diagram8	
3	EH5700L Dimension Drawing11	

# **REVISION HISTORY**

Manual #	<u>Date</u>	Comments
C1422M	6/95	Original manual.
C1422M-A	2/96	Expanded installation instructions; added troubleshooting information; changed heater specifications.
C1422M-B	3/96	Modified installation instructions, Figure 1, and Table A per ECO #96-107, which added power supply barriers and cover to circuit board. Expanded window wiper installation instructions.
	8/96	Changed specifications for maximum camera size in -1, -2 and -3 models. Changed specification for window viewing area.
C1422M-C	4/98	Removed installation instructions for accessories, which have their own manuals. Moved service information and exploded assembly drawings to new manual, C1431SM. Changed manual to new format.

## 1.1 IMPORTANT SAFEGUARDS AND WARNINGS

Prior to installation and use of this product, the following WARNINGS should be observed.

- Installation and servicing should only be done by Qualified Service Personnel and conform to all Local codes.
- Unless the unit is specifically marked as a NEMA Type 3, 3R, 3S, 4, 4X, 6, or 6P enclosure, it is designed for indoor use only and it must not be installed where exposed to rain and moisture.
- 3. Only use replacement parts recommended by Pelco.
- 4. After replacement/repair of this unit's electrical components, conduct a resistance measurement between line and exposed parts to verify the exposed parts have not been connected to line circuitry.
- 5. The installation method and materials should be capable of supporting four times the weight of the enclosure, pan/tilt, camera and lens combination.

## The product and/or manual may bear the following marks:



This symbol indicates that dangerous voltage constituting a risk of electric shock is present within this unit.



This symbol indicates that there are important operating and maintenance instructions in the literature accompanying this unit.



# CAUTION: RISK OF ELECTRIC SHOCK. DO NOT OPEN.



# **CAUTION:**

TO REDUCE THE RISK OF ELECTRICAL SHOCK, DO NOT REMOVE COVER. NO USER-SERVICEABLE PARTS INSIDE. REFER SERVICING TO QUALIFIED SERVICE PERSONNEL.

Please thoroughly familiarize yourself with the information in this manual prior to installation and operation.

# 2.0 DESCRIPTION

Environmental enclosures in the EH5700L Legacy  $^{\! \circ}$  Series are used with Pelco's PT780 Series pan/tilt unit.

The enclosures are constructed of aluminum.

You can install cameras with either fixed focal length lenses or motorized zoom lenses. All models have an adjustable camera sled to accommodate different sizes of cameras and lenses.

# 2.1 MODELS

EH5723L	Environmental enclosure with rear-opening lid. Lid has gas spring to hold it open. 23-inch (58.42 cm) length.
EH5723L-1	EH5723L with 120 VAC thermostatically controlled heater and blower.
EH5723L-2	EH5723L with 24 VAC thermostatically controlled heater and blower.
EH5723L-3	EH5723L with 230 VAC thermostatically controlled heater and blower.
EH5729L	Environmental enclosure with rear-opening lid. Lid has gas spring to hold it open. 29-inch (73.66 cm) length.
EH5729L-1	EH5729L with 120 VAC thermostatically controlled heater and blower.
EH5729L-2	EH5729L with 24 VAC thermostatically controlled heater and blower.
EH5729L-3	EH5729L with 230 VAC thermostatically controlled heater and blower.

# 3.0 INSTALLATION

- Unlatch and raise the enclosure lid. The gas spring will hold the lid in place when it is fully opened.
- 2. Remove the camera sled from the rail:
  - Loosen the screws.
  - Slide the sled so that the screws are in the large part of the mounting slots.
  - c. Remove the sled.
  - d. Remove the parts tied to the sled.
- 3. **EH5723L-1, -2, -3 Models, and EH5729L-1, -2, -3 Models Only -** If you are installing the enclosure <u>in a marine or high-moisture environment,</u> make the following modifications to your enclosure:

Refer to Figure 1 for an exploded assembly diagram of the blower assembly.

- a. Disconnect the electrical plug (3) from the fan (4).
- b. Remove the three sets of screws and washers (A, B, and C) that secure the fan plate (5) and fan (4) to the enclosure.
- c. Remove the four screws and washers (B and D) that secure the fan to the fan plate.
- d. Turn the fan around so that it blows toward the viewing window (refer to the arrows on the fan).
- e. Reinstall the fan on the fan plate.
- f. Reinstall the fan plate and fan in the enclosure.
- g. Reconnect the electrical plug on the fan.
- h. Close the enclosure lid.
- On the bottom of the enclosure, remove the vent (1) grill and filters (2) at the front of the unit. Replace the grill with one of the vent cover plates that was attached to the camera sled as loose equipment.
- On the bottom of the enclosure, attach the other vent cover plate over the grill at the rear of the unit.
- k. Open the enclosure lid.
- 4. Mount the camera/lens to the sled with the 1/4-20 Phillips-head screws that are provided in the parts bag. You can mount the camera to either side of the U-shaped sled, depending on the camera height required.

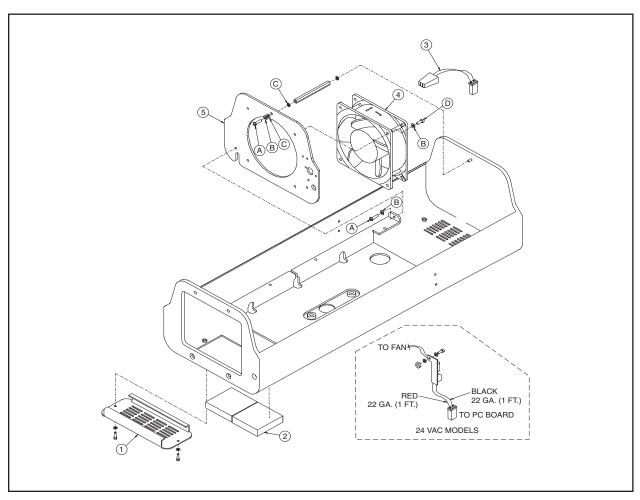


Figure 1. Exploded Assembly Diagram for Blower

- 5. Install the sled and camera/lens in the enclosure:
  - a. If the camera's lens is adjustable, extend the lens to its maximum length.
  - b. Place the sled over the mounting screws in the enclosure.
  - c. Slide the sled forward until the camera's lens almost touches the window.
  - d. Tighten the screws to secure the camera sled to the enclosure.
- 6. Connect the video cable in the enclosure to the video output connection on the camera.
- If you are going to synchronize cameras, connect the synchronization cable in the enclosure to the synchronization connection on the camera.
- 8. If your camera has a motorized zoom lens control, connect or wire the camera's lens control to the LENS or LENS CONTROL connector on the circuit board. Refer to Figure 2 to see where to connect different lens connector options.



**WARNING:** Camera damage possible. You can damage your camera if you connect it to the wrong connector.

If your camera will use the same power as the enclosure, plug the camera into the CAM 1 socket on the circuit board inside the enclo-

If your camera's voltage will be different from the enclosure's voltage, plug the camera into the CAM 2 socket only. **DO NOT** plug the camera into the CAM 1 socket or you can damage your camera. CAM 1 has enclosure voltage on it

## BE CAREFUL - REMEMBER CAM 1 IS ENCLOSURE POWER

NEVER PLUG YOUR CAMERA INTO CAM 1 IF THE CAMERA'S VOLTAGE IS DIFFERENT FROM THE ENCLOSURE'S VOLTAGE.

WARNING: Failure to

tighten the screws may result in damage to the

enclosure when you operate the camera.

9. Wire power from the circuit board to the camera (refer to Figure 2).

There are two ways to supply power to the camera: when the power requirements for the camera and enclosure's accessories are the same (for example, if the camera and accessories use 24 VAC), and when the power requirements for the camera and the enclosure's accessories are different (for example, if the camera uses 24 VAC and the accessories use 120 VAC).

#### When the power requirements are the same:

There are two ways to connect power:

 A three-pin plug is supplied as loose equipment. Connect the wires from the plug to the camera as follows:

> Brown - AC HI Blue - AC NT Green - Ground

Remove the plastic cover over the power supply section of the circuit board.

Connect the plug to the CAM 1 socket on the circuit board.

Replace the plastic cover.

٥r

b. If both the camera and enclosure use 120 VAC and you ordered the optional 120 VAC electrical outlet accessory (O/I OUTLET), connect the 120 VAC plug to the camera. Connect the three-pin plug to CAM 1 (remove the plastic cover over the circuit board and replace the cover after you plug in the connector).

#### When the power requirements are different:

A two-pin plug is supplied as loose equipment. Connect the wires from the plug to the camera as follows:

Brown - AC HI Blue - AC NT

Connect the plug to the CAM 2 socket on the circuit board.

- 10. Adjust the focus and iris on the camera, if necessary.
- 11. Close the enclosure lid and mount the enclosure to the pan/tilt unit:
  - a. Lift the enclosure over the pan/tilt unit and carefully lower the enclosure into the pan/tilt unit to mate the 26-pin RediLINK™ D-type connectors in the shaft of the pan/tilt unit and on the bottom of the enclosure.
  - b. Once the connectors are mated, apply firm pressure downward and to the back of the enclosure to fully seat the enclosure in the pan/tilt unit.
  - Slowly remove your hands from the enclosure, making sure that the enclosure is balanced on the pan/tilt unit.
  - d. With the 5/32 Allen wrench that is supplied with the enclosure, tighten the two set screws on the back of the enclosure where it mounts to the pan/tilt unit.

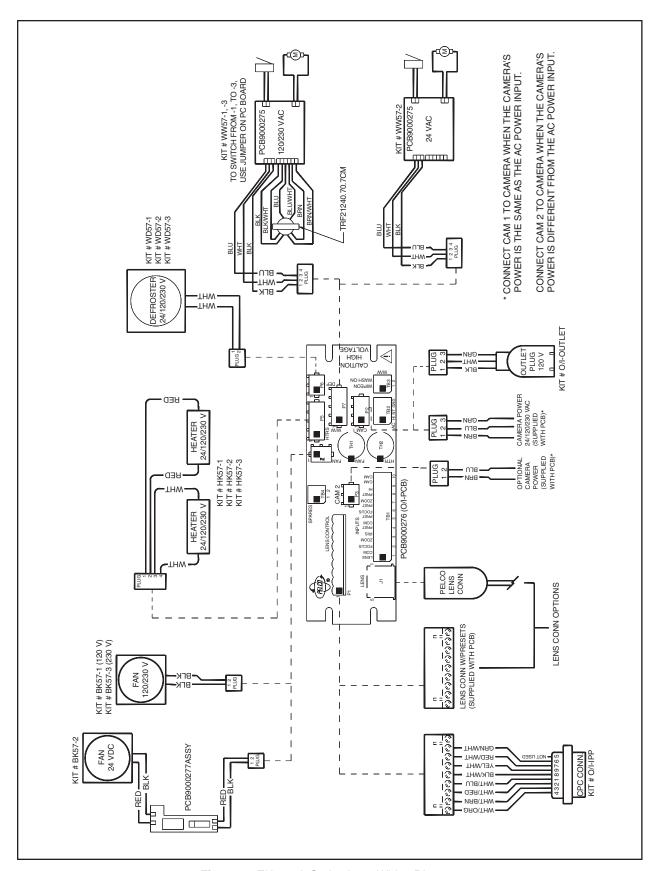


Figure 2. EH5700L Series Input Wiring Diagram

# 4.0 OPERATION

If your enclosure has a thermostatically controlled blower, the thermostat is set to turn the fan on between 77 $^{\circ}$  and 93 $^{\circ}$ F (25 $^{\circ}$  and 34 $^{\circ}$ C) and to turn the fan off between 62 $^{\circ}$  and 78 $^{\circ}$ F (17 $^{\circ}$  and 26 $^{\circ}$ C).

If you enclosure has thermostatically controlled heaters or defroster, the thermostat is set to turn them on between 42° and 58°F (6° and 14°C) and to turn them off between 72° and 88°F (22° and 31°C).

# **5.0 MAINTENANCE**

Perform the following maintenance at regularly scheduled intervals to prolong the operational life and appearance of the equipment.

- Clean the window with a mild nonabrasive detergent in water and a soft cloth to maintain picture clarity.
- 2. If your enclosure has a blower, clean the foam filters as follows:

On the bottom front of the enclosure, remove the two screws in the vent grill.

Remove the vent grill and take out the filters.

Clean the filters with warm water and mild detergent, dry thoroughly, and replace them in the grill.

Reinstall the vent grill.

To order replacement filters, use the part number EH550010045.

## **5.1 SERVICE MANUAL**

If you need to service your unit, obtain a service manual in on of the following ways:

- Go to Pelco's web site at www.pelco.com and find service manual C1431SM.
- Contact Pelco's Literature Department and request service manual C1431SM.

# **6.0 SPECIFICATIONS**

## **ELECTRICAL**

Input Voltage: 24, 120 or 230 VAC, 50/60 Hz

Electrical

Connections: One each of the following:

3-connector terminal block for power input

6-pin lens connector

9-connector terminal block for lens wiring

10-connector terminal block for camera/lens wiring 2-connector terminal block for spare connections

3-pin socket for camera power input

2-pin socket for optional camera power input

2-pin socket for blower 2-pin socket for defroster 4-pin socket for heaters 4-pin socket for wiper/washer

2-pin socket for wiper/washer controls

BNC for video

BNC for camera synchronization 26-pin RediLINK™ D-type connector

(links enclosure to pan/tilt)

Input Power: Heater -1 90 watts

Heater -2: 50 watts Heater -3: 70 watts

Defroster -1,

-2, -3: 30 watts Blower -1, -3: 15 watts Blower -2 10 watts Wiper -1, -2, -3: 15 watts

# **MECHANICAL**

Construction: Aluminum, 0.080 inches (0.20 cm) thick

(Enclosure body and lid)

Finish: Gray polyester powder coat

Window: Glass. 0.25-inch (0.64 cm) thick

Window

Viewing Area: 3.8" H x 4.8" W (9.65 cm x 12.19 cm)

Camera Mounting: Removable camera sled that can be inverted to accommodate

various heights of cameras and lenses

Maximum Camera and Lens Size

EH5723L: 15.5" L x 7.5" W x 5.5" H (39.37 cm x 19.05 cm x 13.97 cm)

EH5723L-1,

-2, -3: 15.5" L x 6.25" W x 5.5" H (39.37 cm x 15.88 cm x 13.97 cm) EH5729L: 21.5" L x 7.5" W x 5.5" H (54.61 cm x 19.05 cm x 13.97 cm)

EH5729L-1,

Dimensions:

-2, -3: 21.5" L x 6.25" W x 5.5" H (54.61 cm x 15.88 cm x 13.97 cm)

Latches: Stainless Steel

See Figure 3

Weight	<u>Unit</u>	<u>Shipping</u>
EH5723L:	12.5 lb (5.68 kg)	14 lb (6.37 kg)
EH5723L-1,		
-2, -3:	14 lb (6.37 kg)	16 lb (7.28 kg)
EH5729L:	17 lb (7.73 kg)	19 lb (8.64 kg)
EH5729L-1,		
-2, -3:	19 lb (8.64 kg)	21 lb (9.55 kg)

# **GENERAL**

NEMA Rating: 3R (4 when vent cover plates are used)

IEC 144 Rating: IP54 (EH5700L-1, -2, -3)

Environment: Indoor/outdoor; -10° to 120°F (-23° to 49°C)

(Design and product specifications subject to change without notice.)

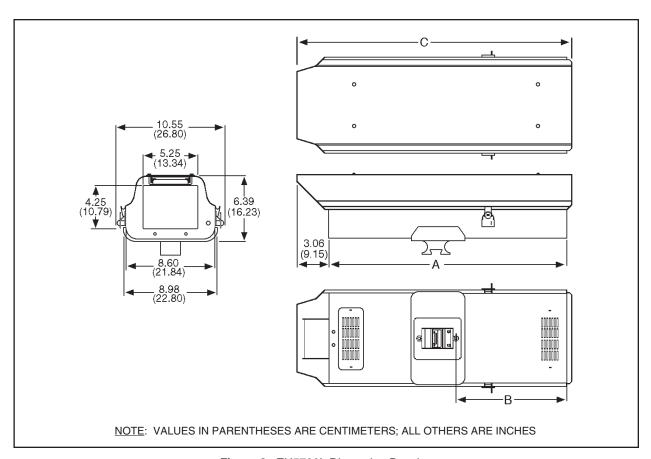


Figure 3. EH5700L Dimension Drawing

## 7.0 WARRANTY AND RETURN INFORMATION

#### WARRANTY

Pelco will repair or replace, without charge, any merchandise proved defective in material or workmanship for a period of one year after the date of shipment.

Exceptions to this warranty are as noted below:

- Five years on FT/FR8000 Series fiber optic products.
- Three years on Genex® Series products (multiplexers, server, and keyboard).
- Three years on Camclosure® and fixed camera models, except the CC3701H-2, CC3701H-2X, CC3751H-2, CC3651H-2X, MC3651H-2, and MC3651H-2X camera models, which have a five-year warranty.
- · Two years on standard motorized or fixed focal length lenses.
- Two years on Legacy®, CM6700/CM6800/CM9700 Series matrix, and DF5/DF8 Series fixed dome products.
- Two years on Spectra®, Esprit®, ExSite™, and PS20 scanners, including when used in continuous motion applications.
- Two years on Esprit® and WW5700 Series window wiper (excluding wiper blades).
- Eighteen months on DX Series digital video recorders, NVR300 Series network video recorders, and Endura™ Series distributed network-based video products.
- One year (except video heads) on video cassette recorders (VCRs). Video heads will be covered for a period of six months.
- Six months on all pan and tilts, scanners or preset lenses used in continuous motion applications (that is, preset scan, tour and auto scan modes).

Pelco will warrant all replacement parts and repairs for 90 days from the date of Pelco shipment. All goods requiring warranty repair shall be sent freight prepaid to Pelco, Clovis, California. Repairs made necessary by reason of misuse, alteration, normal wear, or accident are not covered under this warranty.

Pelco assumes no risk and shall be subject to no liability for damages or loss resulting from the specific use or application made of the Products. Pelco's liability for any claim, whether based on breach of contract, negligence, infringement of any rights of any party or product liability, relating to the Products shall not exceed the price paid by the Dealer to Pelco for such Products. In no event will Pelco be liable for any special, incidental or consequential damages (including loss of use, loss of profit and claims of third parties) however caused, whether by the negligence of Pelco or otherwise.

The above warranty provides the Dealer with specific legal rights. The Dealer may also have additional rights, which are subject to variation from state to state.

If a warranty repair is required, the Dealer must contact Pelco at (800) 289-9100 or (559) 292-1981 to obtain a Repair Authorization number (RA), and provide the following information:

- Model and serial number
- 2. Date of shipment, P.O. number, Sales Order number, or Pelco invoice number
- 3. Details of the defect or problem

If there is a dispute regarding the warranty of a product which does not fall under the warranty conditions stated above, please include a written explanation with the product when returned. Method of return shipment shall be the same or equal to the method by which the item was received by Pelco.

#### **RETURNS**

In order to expedite parts returned to the factory for repair or credit, please call the factory at (800) 289-9100 or (559) 292-1981 to obtain an authorization number (CA number if returned for credit, and RA number if returned for repair).

All merchandise returned for credit may be subject to a 20% restocking and refurbishing charge. Goods returned for repair or credit should be clearly identified with the assigned CA or RA number and freight should be prepaid. Ship to the appropriate address below.

If you are located within the continental U.S., Alaska, Hawaii or Puerto Rico, send goods to:

Service Department Pelco 3500 Pelco Way Clovis, CA 93612-5699

If you are located outside the continental U.S., Alaska, Hawaii or Puerto Rico and are instructed to return goods to the USA, you may do one of the following:

If the goods are to be sent by a COURIER SERVICE, send the goods to:

Pelco 3500 Pelco Way Clovis, CA 93612-5699 USA

If the goods are to be sent by a FREIGHT FORWARDER, send the goods to:

Pelco c/o Expeditors 473 Eccles Avenue South San Francisco, CA 94080 USA Phone: 650-737-1700

Phone: 650-737-1700 Fax: 650-737-0933

Pelco, the Pelco logo, Camclosure, Esprit, Genex, Legacy, and Spectra are registered trademarks of Pelco. Endura and ExSite are trademarks of Pelco.

© Copyright 1998, Pelco. All rights reserved.